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Committee of Experts on the Transport of Dangerous Goods and on the Globally Harmonized System of Classification and Labelling of Chemicals

Sub-Committee of Experts on the Transport of Dangerous Goods
Forty-seventh session
Geneva, 22 June – 26 June 2015
Item 7 of the provisional agenda
Issues relating to the Globally Harmonized System of Classification and Labelling of Chemicals: Hazard communication

Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals
Twenty-ninth session
Geneva, 29 June - 1 July 2015
Item 3 (c) of the provisional agenda
Hazard communication issues: miscellaneous

Prohibition in transport of non-transport GHS pictograms when not in a complete GHS label

Transmitted by the Dangerous Goods Advisory Council (DGAC)[1]

Introduction

1. It is a common practice of some offerors of mixtures and substances subject to GHS to display non–transport GHS pictograms in the same size as and adjacent to transport placards on portable tanks and multi-element gas containers (see pictures in the Annex). In this practice, the GHS health hazard symbol and exclamation mark are presented in their GHS pictograms but not in a complete GHS label as intended by the GHS. The placard size of the pictogram prevents accompaniment by proportionally sized text elements required in a GHS label, i.e. GHS hazard statements, precautionary statements, the product identifier and the supplier identifier.

2. DGAC raised this issue within the GHS Sub-Committee in the past biennium, and a new section in the GHS was agreed as follows:

"1.4.10.4.4 Use of GHS pictograms in transport

[1] In accordance with the programme of work of the Sub-Committee for 2015–2016 approved by the Committee at its seventh session (see ST/SG/AC.10/C.3/92, paragraph 95 and ST/SG/AC.10/42, para. 15).

In transport a GHS pictogram not required by the UN Model Regulations on the Transport of Dangerous Goods should only appear as part of a complete GHS label (see 1.4.10.5.4.1) and not independently.".

3. The text "a GHS pictogram not required by the UN Model Regulations on the Transport of Dangerous Goods" refers to the GHS exclamation point and health hazard pictograms. GHS paragraph 1.4.10.5.4.1 states that the GHS label elements should be located together. While not directly referenced, GHS section 1.4.10.5.2 states that a complete GHS label must contain not only a pictogram, but also signal words, hazard statements, precautionary statements and product and supplier identification.

Discussion

4. Similar to inconsistencies in transport of dangerous goods (TDG) regulations, inconsistencies in GHS implementation can cause delay and denial in the supply chain. Thus it is beneficial to maintain harmonization between the Model Regulations and the GHS to manage a consistent global transport system. The Model Regulations facilitate safe commerce based on biennial implementation by the International Maritime Organization, the International Civil Aviation Organization, and various regional and national regulations. To provide internationally enforceable requirements aligned with the intent of the GHS, DGAC proposes to mirror the new GHS requirement for transport in a complementary text in the Model Regulations.

5. It remains necessary and desirable to allow the use of GHS pictograms on portable tanks, but only as part of a complete and proportional GHS label. GHS guidance on size proportionality of the pictogram and text elements of a GHS label is found in the GHS Annex 7, Example 7, Paragraph (e):

> "The pictograms may be distinguished by adjusting their size. Generally speaking, the size of the non-transport pictograms should be proportional to the size of the text of the other label elements. This would generally be smaller than the transport-related pictograms, but such size adjustments should not affect the clarity or comprehensibility of the non-transport pictograms;"

6. While studying the GHS and the Model Regulations hazard communication requirements, we identified that the inter-relationship of TDG and GHS hazard communication is not addressed in Part 5 of the Model Regulations. Therefore we propose a new section in Part 5 to address prohibited placarding. A definition of GHS label is also proposed.

Proposal

7. Create a new section in the Model Regulations as follows:

> "5.3.1.X Prohibited placarding
>
> GHS pictograms are prohibited from appearing on cargo transport units, unless they appear as an element within a complete GHS label, of a size proportional to the text elements."

8. Create a new definition of GHS label:

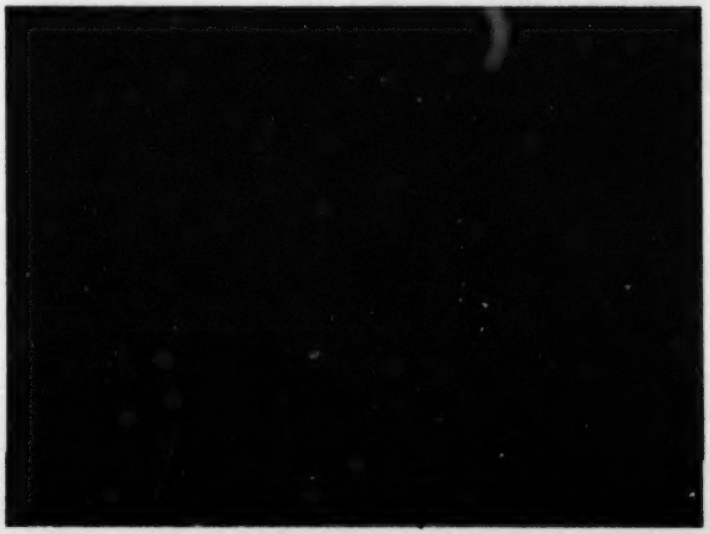
> "GHS Label - A GHS label means the group of elements required by the GHS in paragraph 1.4.10.5.2 and placed together as required by paragraph 1.4.10.5.4.1."

Annex

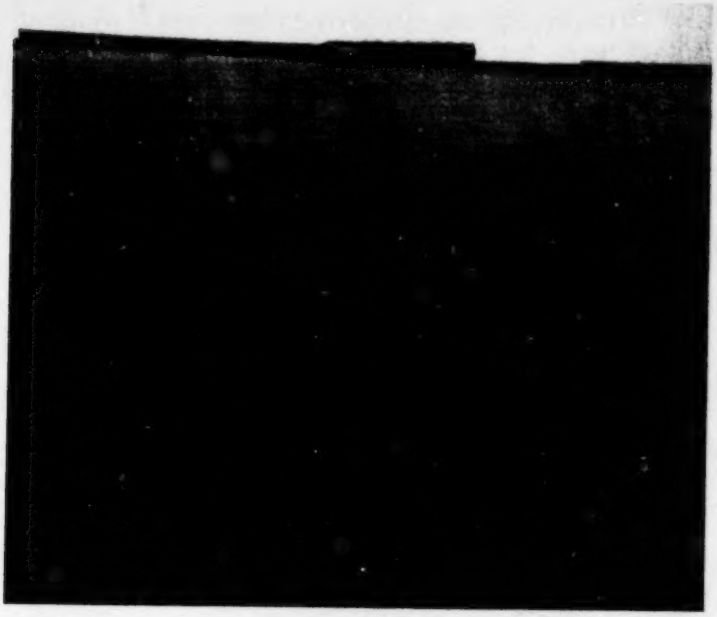
Examples of GHS pictograms appearing alone, not compliant with GHS paragraph 1.4.10.4.4

Example 1

Example 2



Example 3



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Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

Twenty-ninth session
Geneva, 29 June – 1 July 2015
Item 3 (c) of the provisional agenda
Hazard communication issues: Miscellaneous

GHS labels in transport on combination packagings containing multiple goods not subject to Transport of Dangerous Goods regulations

Transmitted by the Dangerous Goods Advisory Council[1]

Introduction

1. A current topic of concern amongst industry is the GHS labelling of packages of mixed products not subject to the regulations for the Transport of Dangerous Goods (TDG). Example 3 in Annex 7 of the GHS, states: "Some competent authorities may require a GHS label on the outer packaging in the absence of a transport label." While GHS labelling of the immediate containment is a basic requirement, the replication of multiple labels on transport packages is, in some scenarios, impractical and may reduce safety due to the incomprehensibility of multiple labels being present simultaneously. DGAC requests that the Sub-Committee consider this issue during the current biennium to aid in its resolution, perhaps in a working group discussion in addition to the plenary discussion.

Discussion

2. The GHS is silent on which elements or layers of packaging should be labelled. Packaging terms are not defined in Chapter 1.2 of the GHS. The following terms are

[1] In accordance with the programme of work of the Sub-Committee for 2015-2016 approved by the Committee at its seventh session (refer to ST/SG/AC.10/C.4/56, annex III and ST/SG/AC.10/42, para. 15).

defined in Chapter 1.2 of the TDG regulations and may be of use: package, packaging, inner packaging, intermediate packaging, outer packaging, combination packaging, and overpack. The terms single packaging and composite packaging, e.g. drums, are excluded from this proposal, as mixed packages are not applicable.

3. Packaging is the means used to contain a product, whether singly or in combination. A package is a packaging that contains product, regardless of whether or not the product is subject to transport regulations. An inner packaging immediately contains the product, as a component of a combination package, but may not be used by itself in transport. An outer packaging is the minimum layer allowed for use in transport to protect an inner package. Inner packaging(s) in an outer packaging, together with any intermediate packaging, form a combination packaging, which is the focus of this discussion. Combination packages may be overpacked for transport or materials handling, e.g. a stretch-wrapped pallet. Overpacks also include the placement of one or more combination packages inside another packaging. This method is frequently used for efficiency in small parcel shipments.

4. Labelling is applied according to GHS on inner packagings, i.e. the packaging immediately containing the product, e.g. a bottle. Depending on the jurisdiction, the same may be true for intermediate packaging, e.g. a sleeve used to bundle multiple inners into a multi-pack. Manufacturers and formulators must incorporate GHS labelling into their processes, including bundling different products together as a multi-pack. In this case, appropriate GHS warnings may be determined and coordinated in advance of shipments, and are not the primary focus of this proposal.

5. Significant difficulty arises in scenarios for samples and where pick-pack operations or distributors re-pack different product inner packages together in an outer package. These combinations are based on customer orders, and the number of possible shipping combinations is infinite and unplanned. In pick-pack operations, orders are typically filled on high speed, high volume automated lines within a manner of minutes from start to finish. Orders are often palletized and shipped on the same day the order is received. Also, upon customer receipt, the transport outer packaging is often immediately opened and discarded. In some scenarios such as samples, the number of different products involved may exceed one hundred. This results in significant challenges, which are:

(a) Computerization of real-time labelling for these complex possibilities is not feasible. Manual reproduction of labels would be difficult.

(b) Depending on the number of different products, replication of individual labels on the outer packaging may not be possible, due to the quantity of unique labels that would have to be applied versus the available area of blank box exterior.

(c) Even if numerous GHS labels are applied to an outer package, safety may be reduced due to the confusing array of different warning labels on the exterior of the box.

6. The use of GHS labels on outer packagings suitable should be considered in the context of what is required for higher tier hazards governed by the TDG regulations. When a dangerous good is present, GHS labelling does not apply to the outer packaging of a combination package. We wonder what justification there is for requiring GHS labelling for lower hazard goods not subject to the TDG Model Regulations.

7. According to the TDG Model Regulations, dangerous goods are classified into one of nine classes. Safety marks and labels describing the hazards of the product are normally required. The label(s) must consist of a pictogram(s) (symbols in GHS) and include the class or division number of the product. Marks generally consist of the proper shipping name and UN number identifying the product.

8. However, for goods which have mitigating factors of (a) being in the lower tier hazards of dangerous goods, and (b) which are also in small packagings up to 5 L or 5 kg, the aforementioned package labelling and marking requirements are waived. TDG regulations confirmed this allowance after analysing the risk presented in small volume shipments of low hazard dangerous goods and coming to the conclusion that the risk was minimal. Normal shipping documentation is also waived for transport by road and rail.

9. This system of exceptions based on low hazard and small packages is called "Limited Quantities" (LQ). The only package marking required is a pictogram which conveys that LQ products are present. No specific information as to the type of hazards is communicated, nor is there any guidance for storage or other precautionary statements. GHS labelling still applies to the inner packagings so that upon opening the transport outer packaging full warnings are available for supply and use.

10. LQ is of crucial importance for the distribution of household chemicals, and the number and volume of products distributed is high. Similar products pose still lesser risk if they fall below the criteria for Packing Group III. When this happens, they are no longer regulated under TDG regulations, but may still be regulated by GHS for health or environmental hazards. If GHS labelling is required on transport packaging for products not regulated by TDG, the hazard communication requirements for the lower hazard products will be far greater than for the higher hazard LQ products. Relaxations in transport requirements for lower tier hazards exist to avoid creating a culture of non-compliance and soft enforcement which can have a detrimental effect on safety for products of higher hazards.

11. It may be helpful to consider some estimated shipping volumes to obtain a sense of the impact of labelling requirements for mixed packages. According to a recent trade publication (http://www.retailresearch.org/onlineretailing.php), e-commerce orders in 8 European Union (EU) countries reached €156.28 bn in 2014, with a +18% growth anticipate for 2015. The average order size is only €50.00 (http://www.eulogisticshub.com/blog/2014/07/supply-chain-is-important-capability-for-ecommerce-companies/), so the number of cartons in our example is 3.12 billion. Using proprietary estimates of shipments from our members it is possible to determine percentages of GHS-only, TDG and non-hazardous products. This allows us to qualitatively estimate data as follows:

Estimated Breakdown of 3.12 Billion E-Commerce Packages in 8 EU Countries

	Containing GHS but no TDG products	Containing TDG (with or without GHS-only products)	Containing neither GHS or TDG products
GHS label required on outer packaging	Yes	No	No
Number of cartons in 8 EU countries	17.9 Billion Cartons	62.5 Billion	75.8 Billion
Percent of cartons	11.50%	40%	48.50%

Summary

12. Factories are able to implement GHS labelling on their packages, and the concerns in this discussion are raised when downstream suppliers mix products into different transport packages. Some consideration should be given within the GHS to facilitate this practical need at the nexus of distribution and supply and use.

Proposal

13. It is recommended that the Sub-Committee address whether an exception from GHS labelling during transport and related storage would benefit the practical implementation of the GHS.

14. This work is already under consideration in certain regions, but it is DGAC's recommendation that this work be undertaken at the Sub-Committee level to ensure a globally harmonized approach and prevent unnecessary impacts to commerce.

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Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

Twenty-ninth session
Geneva, 29 June – 1 July 2015
Item 3 (c) of the provisional agenda
Hazard communication issues: Miscellaneous

Application of precautionary statement P502 to explosives

Transmitted by the expert from Sweden[1]

Background

1. In the discussion paper INF. 18 submitted to the 25th session of the Sub-Committee, Sweden pointed to the problems of applying precautionary statement P501 to pyrotechnic articles supplied to the general public. P501, which reads "Dispose of contents/container to ..." is the only precautionary statement prescribed for explosives according to Table A3.2.5 in Section 2 of Annex 3 in the GHS.

Problem

2. As further explained in the previous paper from Sweden, P501 is not well-suited for explosives, since:

(a) for functioning explosives there are no contents and usually also no container left after use, and

[1] In accordance with the programme of work of the Sub-Committee for 2015-2016 approved by the Committee at its seventh session (refer to ST/SG/AC.10/C.4/56, annex III and ST/SG/AC.10/42, para. 15).

(b) for malfunctioning or non-used explosives special care is needed and no "normal" chemicals disposal, such as disposal at an environmental station, is advisable or even allowed.

3. The concern is particularly large for explosive articles that are supplied to the general public, such as fireworks, signal flares and ammunition. It is important that this audience receives clear instructions on how to dispose of such products – in particular when it comes to products that have malfunctioned, have expired or for some other reason have not been used. Ill-formulated advice on the label may lead to the disposal of such explosive waste in a way that poses a risk e.g. to the workers that handle the waste.

Proposal

4. The only other currently available precautionary statement for disposal in the GHS is P502, which reads "Refer to manufacturer/supplier for information on recovery/recycling.". It is currently only applicable to substances/mixtures that are classified as hazardous to the ozone layer (see Table A3.2.5 in the GHS).

5. P502 seems in most, if not all, cases to be more suitable than P501 for explosives disposal, and there is no reason this precautionary statement could not be used for more hazard classes than hazardous to the ozone layer. Malfunctioning, expired or non-used explosives handled by the general public, such as fireworks, signal flares and ammunition, should normally be returned to the supplier for proper destruction. P502 could then be formulated: "Refer to supplier for information on recovery.". For other types of explosives, referral to the manufacturer may be more suitable.

6. It is therefore proposed to prescribe the use of P502 for explosives in addition to P501 (option A) or instead of P501 (option B). Necessary amendments to the GHS to accomplish both these options are shown below.

7. Since malfunctioning and expired explosives are often not recovered or recycled but rather destroyed, it may be considered to add "disposal" to the options of phrasing P502 so that it reads "Refer to manufacturer/supplier for information on recovery/recycling/disposal." This would then automatically become an option also for the hazard class hazardous to the ozone layer, which does not appear to be problematic.

Option A: Apply P502 for explosives (in addition to P501)

In Annex 3, Section 2, Table A3.2.5, for P502, insert a new row for the hazard class "Explosives (chapter 2.1)", hazard categories "Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5", as follows.

Code (1)	Disposal precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P502	Refer to manufacturer/supplier for information on recovery/recycling	**Explosives (chapter 2.1)**	**Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5**	
		Hazardous to the ozone layer (chapter 4.2)	1	

Option B: Exchange P501 for P502 for explosives

In Annex 3, Section 2, Table A3.2.5:

- For **P502**: insert a new row for the hazard class "Explosives (chapter 2.1)", hazard categories "Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5", as follows:

Code (1)	Disposal precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P502	Refer to manufacturer/supplier for information on recovery/recycling	**Explosives (chapter 2.1)**	**Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5**	
		Hazardous to the ozone layer (chapter 4.2)	1	

- For **P501**: delete the row for the hazard class "Explosives (chapter 2.1)", hazard categories "Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5", as follows:

Code (1)	Disposal precautionary statements (2)	Hazard class (3)	Hazard category (4)	Conditions for use (5)
P501	Dispose of contents/container to...	~~**Explosives (chapter 2.1)**~~	~~**Unstable explosives and Divisions 1.1, 1.2, 1.3, 1.4, 1.5**~~	*[unchanged]*
		[Remainder of the table: unchanged]		

Additional option C: Add "disposal" to the text of P502

Add "disposal" to the text of P502 in Table A3.2.5 (applicable to options A and B), as follows:

"Refer to manufacturer/supplier for information on recovery/recycling**/disposal**."

Consequential amendments

In Annex 3, section 3, matrix tables in A3.3.5, amend the disposal precautionary statements in line with the adoption of option A or B, and additional option C.

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Sub-Committee of Experts on the Transport of Dangerous Goods

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Item 2 (h) of the provisional agenda
Explosives and related matters: revision of Chapter 2.1 of the GHS

Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

Twenty-ninth session

Geneva, 29 June - 1 July 2015
Item 2 (a) of the provisional agenda
Classification criteria and related hazard communication: Work of the Sub-Committee of Experts on the Transport of Dangerous Goods (TDG) on matters of interest to the GHS Sub-Committee

GHS Classification of explosives

Transmitted by the Sporting Arms and Ammunition Manufacturers' Institute (SAAMI)[1]

Introduction

1. The Sub-Committee will recall that in the last biennium the Secretariat recommended that the forthcoming revised edition of the Manual of Tests and Criteria be updated to include, where applicable, relevant references to the GHS (see ST/SG/AC.10/C.3/2014/61–ST/SG/AC.10/C.4/2 014/8). This included a complete analysis of the Manual of Tests and Criteria with detailed recommendations in INF.8 (TDG) – INF.5 (GHS), including five addendums.

2. Also in the last biennium, the expert from Australia proposed a review of Chapter 2.1 of the GHS regarding explosives classification (see ST/SG/AC.10/C.3/2014/79 – ST/SG/AC.10/C.4/2014/15).

[1] In accordance with the programme of work of the Sub-Committee for 2015–2016 approved by the Committee at its seventh session (see ST/SG/AC.10/C.3/92, paragraph 95 and ST/SG/AC.10/42, para. 15)

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3. In conjunction with these proposals, SAAMI believes that some clarification of the GHS approach to explosives classification would be beneficial.

GHS explosives classification

4. According to GHS 1.1.2.6.2.1, classification depends on intrinsic properties. This approach is augmented per GHS 1.3.2.4.5.2, and the physical hazards of explosives are often altered by inclusion in an article and/or packaging. The principles and decision logic of the Manual of Tests and Criteria are founded in part on this principle. SAAMI is of the opinion that the mention of differences in the classification approach for explosives should be elevated within the introduction of the GHS. SAAMI proposes to amend paragraph 1.3.2.2.1 as shown in paragraph 9 below.

5. Section 2.1.4 states: "The decision logic and guidance, which follow, are not part of the harmonized classification system, but have been provided here as additional guidance...". The summary charts in Figures 2.1.1 to 2.1.3 are taken from the Manual of Tests and Criteria. SAAMI recommends that the charts be deleted and replaced by a reference to the Manual of Tests and Criteria. We feel that duplication is unnecessary and that it will be more efficient to have one version of each flow chart in the Manual of Tests and Criteria.

6. Section 2.1.2.2 states that explosives not classified as an unstable explosive are classified into a division based on the Manual of Tests and Criteria according to Table 2.1.1. SAAMI proposes to clarify that Table 2.1.1 is provided for guidance purposes and does not supersede the Manual of Tests and Criteria.

7. Table 2.1.1 provides a summary of the classification process in the Manual of Tests and Criteria. The tests in Series 2 and Series 3 are highlighted. Since Series 6 is the only series used to assign a division, it is very important and should be highlighted as well.

8. The intrinsic hazard of an "Explosion" is present in manufacturing when an explosive composition or article is formed. In manufacturing, the explosives as they move through the process are non-steady state, and cannot be assigned to a division of hazard. Such processes include feeding, mixing, blending, extruding, pressing, filling, assembly, etc. Risk management protocols require characterization of explosive substances and articles throughout the manufacturing process and the communication to affected workers regarding the potential operational hazards. Therefore it is most appropriate to classify the product as generally explosive, and not assign it to Divisions 1.1 to 1.6. Manufacturers should be allowed to voluntarily classify an explosive as an unstable explosive without comprehensive testing.

Proposal

Chapter 1.3

9. In paragraph 1.3.2.2.1, add a new sentence at the end of the paragraph as follows:

"1.3.2.2.1 The GHS uses the term "hazard classification" to indicate that only the intrinsic hazardous properties of substances or mixtures are considered. <u>In special cases, such as for explosives, alternative classification principles may apply.</u>"

Chapter 2.1

10. Amend paragraph 2.1.4 as follows:

"The decision logic and guidance~~, which follow, are not part of the harmonized classification system, but have been provided here as additional guidance~~ in the *UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria* apply. It is strongly recommended that the person responsible for classification studies the criteria before and during the use of the decision logic.".

11. Delete Figures 2.1.1, 2.1.2 and 2.1.3.

12. In paragraph 2.1.2.2, amend the end of the sentence before the table as follows:

"… ~~according to~~ as summarized by the following table."

13. Insert an entry in Table 2.1.1 below "Thermal stability" as follows:

"Assignment to a Division:	according to UN Test Series 6 (Section 16 of the *UN Recommendations on the Transport of Dangerous Goods, Manual of Tests & Criteria*).

14. Amend the sentence at the bottom of Table 2.1.1 as follows:

"~~Further tests are necessary to allocate the correct division.~~ A classification of unstable explosive may be voluntarily assigned to explosives in manufacturing or other processes without testing."

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Sub-Committee of Experts on the Globally Harmonized System of Classification and Labelling of Chemicals

Twenty-ninth session
Geneva, 29 June – 1 July 2015
Item 3 (a) of the provisional agenda
Hazard communication issues:
Labelling of small packagings

Labelling of small packagings

Transmitted by the European Chemical Industry Council (CEFIC) on behalf of the informal correspondence group

Introduction

1. At its 28th session the Sub-Committee adopted a first example illustrating some of the general principles applicable to the labelling of small packagings (see document ST/SG/AC.10/2014/22) which had been proposed for inclusion in Annex 7 of the GHS. The Sub-Committee noted that the informal correspondence group again discussed a revised proposed second example (see informal document INF.27) which has been developed to illustrate other labelling issues (e.g. product is required to carry a large number of GHS label elements and is sold in more than one country) and their possible solutions (e.g. the use of fold-out labels).

Development of an example for fold-out labels

2. The proposed second example presented during the 28th session (see informal document INF.27) has been further developed to reflect comments/suggestions brought forward by members of the informal correspondence group during its meeting in December 2014.

3. The comments/suggestions raised during the informal correspondence group meeting did not impact the principle that was proposed for fold-out labels (i.e. its use in the

particular scenario plus the proposed format and contents). All suggestions have been taken into account in the preparation of the revised proposed second example shown below.

4. As this is a multilingual example, different languages are also presented in the drawing of the label. The group chose several languages to illustrate the concept, although in practice this combination of languages on a label may be rare.

5. This revised second example detailed below and its proposed inclusion in Annex 7 of the GHS are submitted for further consideration by the Sub-Committee.

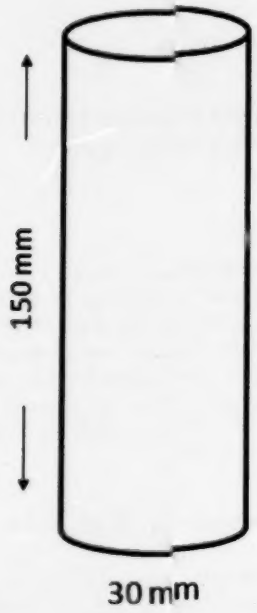
Example: Multilayer booklet format/fold-out label

(i) Product and use:

Activator for professional use

(ii) Packaging description and size

Metal container with 100 ml capacity



(iii) Labelling problems encountered

The product is required to carry a large number of GHS label elements (three hazard pictograms, three hazard statements and numerous precautionary statements).

Besides that, it will be sold in different countries, so different languages are required.

(iv) Possible options to address labelling problems encountered

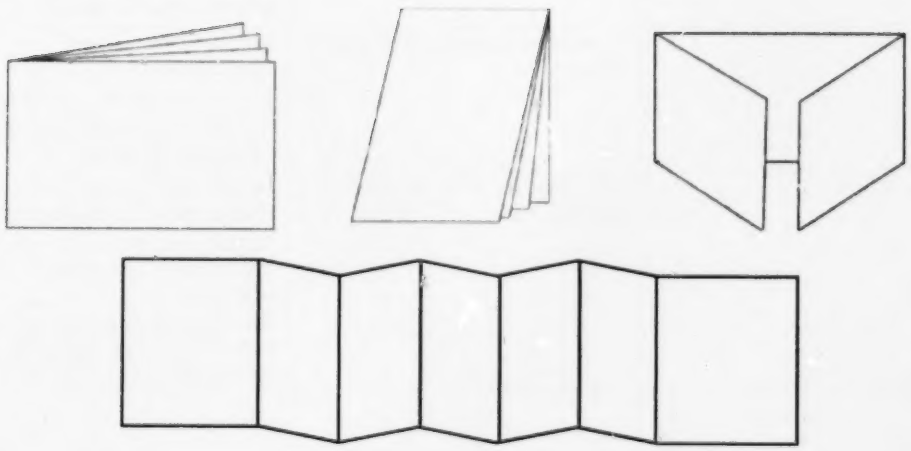
Issue	Potential options	Comments
Not possible to put all applicable GHS label elements and directions for use on the immediate container in all languages (i.e. the metal container) due to its size and shape	Provide label elements in a fold-out label securely attached to the metal container	Possible practical solution – fold-out label must be securely attached to the container and remain so during foreseeable conditions and period of use Provisions for fold-out labels e.g. what label elements must go on the front page and what elements could appear on the internal fold-out page(s)? Minimum size of pictograms or text to ensure the readability of the information? Layout of the pictograms – can they be contiguous or do they have to be separate?
	Provide label elements on a tie-on tag	Not practical as tie-on tag would need to be very large to accommodate all required labelling even with printing on both sides of the tag. Large tag may impede use of the product. Could possibly attach a fold-out label to the tie-on tag but no guarantee the tag would remain attached to the container – may impede user during application thus could possibly be removed. General principles require all applicable label elements to appear on immediate container where possible; also some label elements on the immediate container may need to be accessible to users throughout life of product. Would therefore also need to include minimum label elements on immediate container just in case the tie-on tag is removed by the user.
	Provide label elements on an outer packaging	Not an option – product is not supplied in outer packaging Also need to take account of sustainability considerations (e.g. packaging reduction, environmental footprint, etc.)
	Increase the size of the container so that a larger label can be affixed	Increasing the size of the container is not practical from the intended use perspective. Increasing the size of the container without increasing product volume may be misleading Also need to take account of sustainability considerations (e.g. packaging reduction, environmental footprint, etc.)

(v) Proposed/suggested solution

Multilayer booklet format/fold-out label which is securely affixed to the immediate container (i.e. the fold-out label is attached so that it remains affixed during the foreseeable conditions and period of use). The fold-out label is produced in such a way that the front part cannot be detached from the remainder of the label.

Examples of formats for multilayer booklet format/foldout labels which could be used for the proposed/suggested solution are:

Reading book style **Order-book style** **"window"-style**



"accordion" style

The information is structured as follows:

Front page

Information to be provided on the front page of the multilayer/fold-out label should contain at least:

- Product identifier,
- Hazard pictogram(s)
- Signal word
- Supplier identification (name, address and telephone number of the company)

Front page would also include a symbol to inform the user that the label can be opened and to illustrate that additional information is available on inside pages. Besides this, the languages which are covered by the label should be indicated using the country codes or language codes on the front page.

Pages inside

Full product identifier including hazardous components as applicable, signal word, hazard statements, precautionary statements, and additional information (e.g. directions for use, information required by other regulations, etc.).

Back page (affixed to the immediate container):

- Product identifier,
- Hazard pictogram(s)
- Signal word
- Supplier identification (name, address and telephone number of the company)

It is recognized that some regulatory systems (e.g. pesticides) may have specific requirements for the application of labels using a multilayer or booklet style format. Where this is the case, labelling would be undertaken in accordance with the competent authority's requirements.

The text on the inside pages can also be distributed on more than one page, if the available space is not sufficient. In general it is better to spread the text across more than one page than to have smaller letters that make the text difficult to read. However, in practice there may be a limit on the number of folds and so on the amount of text and number of languages that can be included, depending on the size of the container. As illustrated in the example, indicators of each language should be included on the front page and within the fold-out label to make it easier for the readers to identify text in their language.

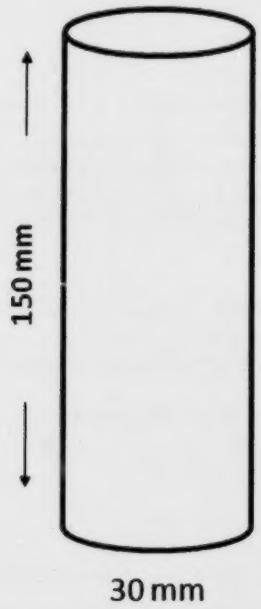
Proposal

Add a new example in annex 7 of the GHS as set out in the following annex.

Annex

Example 9: Example for fold-out label

Metal container with 100 ml capacity containing a product for professional use



The product is required to carry a large number of GHS label elements (three hazard pictograms, three hazard statements and numerous precautionary statements). Besides that, it will be sold in different countries, so different languages are required.

A fold-out label is securely affixed to the immediate container (i.e. the fold-out label is attached so that it remains affixed during the foreseeable conditions and period of use). The fold-out label is produced in such a way that the front part cannot be detached from the remainder of the label.

The information is structured as follows and is provided, if applicable, in all the languages used for the label:

Front page

The information provided on the front page of the fold-out label comprises:

- Product identifier,
- Hazard pictogram(s)
- Signal word
- Supplier identification (name, address and telephone number of the company)

The front page also includes a symbol to inform the user that the label can be opened and to illustrate that additional information is available on inside pages. Besides this, the languages which are covered by the label are indicated using the country codes or language codes on the front page.

Pages inside

- Full product identifier including hazardous components as applicable
- Signal word
- Hazard statements
- Precautionary statements
- Additional information (e.g.directions for use, information required by other regulations, etc.).

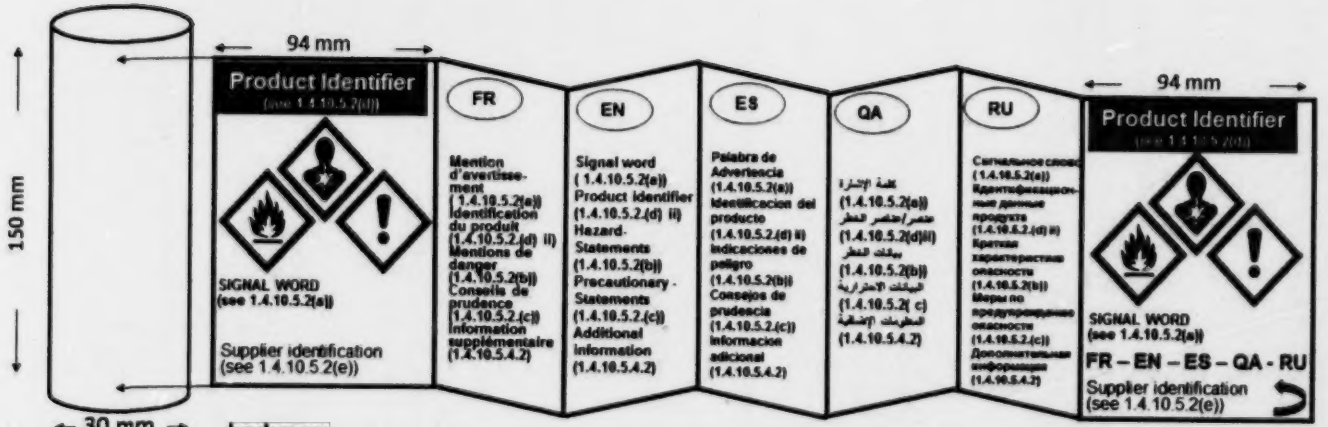
Back page (affixed to the immediate container)

- Product identifier,
- Hazard pictogram(s)
- Signal word
- Supplier identification (name, address and telephone number of the company)

It is recognized that some regulatory systems (e.g. pesticides) may have specific requirements for the application of labels using a multilayer or booklet style format. Where this is the case, labelling would be undertaken in accordance with the competent authority's requirements.

The text on the inside pages can also be distributed on more than one page, if the available space is not sufficient. In general it is better to spread the text across more than one page than to have smaller letters that make the text difficult to read. However, in practice there may be a limit on the number of folds and so on the amount of text and number of languages that can be included, depending on the size of the container. As illustrated in the example, indicators of each language should be included on the front page and within the fold-out label to make it easier for the readers to identify text in their language.

See illustration on next page ([x] scale).



back page
Completely fixed to immediate container

front page
wrapped around the can